

Title (en)
SHROUD ABRADABLE COATINGS AND METHODS OF MANUFACTURING

Title (de)
ABREIBBARE UMMANTELUNGSBESCHICHTUNGEN UND VERFAHREN ZUR HERSTELLUNG

Title (fr)
REVÊTEMENTS ABRADABLES DE CARÉNAGE ET PROCÉDÉS DE FABRICATION

Publication
EP 3040441 A1 20160706 (EN)

Application
EP 15199925 A 20151214

Priority
US 201414587744 A 20141231

Abstract (en)
Methods 200,300 of manufacturing turbine shrouds 10 with an abradable coating 14 that balance the apparently contradictory requirements of high flowpath solidity, low blade tip wear, and good durability in service may include forming an abradable coating on a surface of a coating system to form a substantially smooth flowpath surface. Forming the abradable coating 14 includes forming a relatively porous, smooth abradable coating. The methods may also include machining the abradable coating 14 so as to achieve a substantially smooth flowpath surface. Corresponding turbine shroud (10).

IPC 8 full level
C23C 4/11 (2016.01); **C23C 4/10** (2016.01); **F01D 11/12** (2006.01)

CPC (source: CN EP)
C23C 4/01 (2016.01 - EP); **C23C 4/02** (2013.01 - EP); **C23C 4/11** (2016.01 - EP); **C23C 4/12** (2013.01 - CN); **C23C 4/18** (2013.01 - EP); **F01D 11/122** (2013.01 - CN); **F01D 11/125** (2013.01 - EP); **F05D 2230/31** (2013.01 - EP); **F05D 2300/211** (2013.01 - EP); **F05D 2300/2118** (2013.01 - EP)

Citation (search report)

- [X] EP 2192098 A2 20100602 - ROLLS ROYCE CORP [US]
- [X] US 2009148278 A1 20090611 - ALLEN DAVID B [US]
- [X] US 2009162674 A1 20090625 - BOUTWELL BRETT ALLEN [US], et al
- [E] EP 2955243 A2 20151216 - GEN ELECTRIC [US]
- [E] EP 2955333 A1 20151216 - GEN ELECTRIC [US]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3040441 A1 20160706; BR 102015032658 A2 20161004; CA 2915468 A1 20160630; CN 105756720 A 20160713; JP 2016125487 A 20160711

DOCDB simple family (application)
EP 15199925 A 20151214; BR 102015032658 A 20151228; CA 2915468 A 20151217; CN 201511014276 A 20151231; JP 2015245791 A 20151217